MISCELLANEOUS NOTES

circular pen 30 cm H x 1.5 m in diameter. A thick layer of sand is used on the floor. Young chicks are sometimes agressive & better separated by glass between pens.

After the 11th day the chicks are moved to a large indoor enclosure 1.5 m W x 3 m L x 60 cm high with sand floor. They are more compatible as they grow older, but should be watched closely when put together in a small area.

30 day old chicks are shifted to enclosures 10'W x 30'L with the first 10' covered in. Clover & lucerne are grown in the enclosures. When the chicks are four months old they are

DIVISIONAL FOREST OFFICER, WORKING PLANS DIVISION, 584 DEWAN'S ROAD, MYSORE- 570 004, June 22, 1979. transferred to open enclosures with plently of trees & shrubs.

Diseases: There have been no problem with diseases as the species are very hardy. The main losses are due to fractures of the wings & legs especially when rearing wild caught chicks, due to a combination of insufficient calcium in the diet causing bone deterioration and poor management regarding handling them.

At the time of my visit, Serendip had eight adult males, six adult females twelve years & over. In addition there are seven hand reared juveniles, two males & five females.

M. K. APPAYYA

11. FEEDING HABITS OF COPPERSMITH MEGALAIMA HAEMACEPHALA (MULLER)

The Coppersmith, Megalaima haemacephala is a frugivorous bird. Recently a Coppersmith (Megalaima haemacephala) was caught in one of the mulberry fields in the campus of the Tamil Nadu Agricultural University, Coimbatore. The bird was kept in a cage and fed with fruits of mulberry, grapes, and Ficus bengalensis, thrice daily in the morning, afternoon and evening and the quantity of the fruits consumed each time was recorded. The bird was fed with mulberry for six weeks whereas Ficus bengalensis and grapes were restricted to one week only. The data gathered are furnished in the Table 1. The feeding studies reveal that the bird consumed 48.64

TABLE 1

			The state of the s
Types of Food	No. of weeks	Mean quantity of berries con- sumed in gms/ day	Energy* (kilo joules)
Mulberry	I	48.64	100
	II	52.54	108
	III	66.30	136
	IV	75.36	155
	V	74.25	152
	VI	75.77	155
Ficus	I	54.06	163
Grapes	I	35.35	124
			- Control - Section - Sect

^{*} Adopted from Gopalan *et al.* (1971). 1 calorie = 4.184 joule.

to 75.77, 54.06, 35.35 g of mulberry, ficus and grapes respectively. Lack (1954) pointed out that the food requirement of birds may be stated in calories rather than grammes since the quantity of food varies with the nutritive value. Hartley (1964) reported that berry eating thrushes commonly take three full meals a day. According to Kear (1972) small species consume more in proportion to their size than large ones. The present observations indicate

that the Coppersmith weighing 30.0 g can consume berris equivalent to 1.6 to 2.6, 1.8 and 1.1 times of its own body weight and feed steadily during the day. It would be necessary to try this experiment with more than one individual before making further conclusions.

The energy requirements of the bird in terms of kilojoules ranged from 100 to 163 per day.

TAMIL NADU AGRICULTURAL UNIVERSITY, COIMBATORE- 641 003, December 20, 1980.

T. S. MUTHUKRISHNAN RAJESWARI SUNDARABABU

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12. PERICROCOTUS FLAMMEUS (FORSTER) IN KUTCH AND SOME GENERAL COMMENTS

December 25, 1980 I saw a female scarlet minivet in my garden here (in Bhuj, and it is still there till today). This is the first time this species has been seen in this area.

Taken by itself, this may be considered as a rare, or accidental occurrence. However if one were to take the appearance of *Pericrocotus flammeus* in Kutch together with that of other birds like the green pigeon (seen on 30th and collected on 31st Jan., 1980 by M. K. Hanvantsinghji at Mata-no-Mad, about 90 km.

west of Bhuj), the goldenbacked woodpecker (already reported by me) and several other species which have been recorded for the first time only in the last decade or so, the question would arise as to whether some birds have extended their known ranges. It could very possibly be so owing to favourable changes having taken place in the ecology of some areas through irrigation etc. This can only be confirmed through careful and meticulous monitoring by resident birdwatchers in Kutch.

JUBILEE GROUND, BHUJ, KUTCH, February 3, 1981. M. K. HIMMATSINHJI